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SEQUENCE LISTING

<110> Hanson, Veneta
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<120> Diagnostic Test for the Detection of Autoantibodies in Patient Suffering
From Neuropsychiatric Lupus

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<140> US 10/676,691

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<212> DNA

<213> homo sapiens

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<213> Chicken

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Leu Arg Asp Gly Asp Lys Gln Arg Tyr Leu Gly Lys Gly Val Leu Lys
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100 105 110

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130 135 140

Leu Pro Val Pro Ala Phe Asn Val Ile Asn Gly Gly Ser His Ala Gly
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Ser Phe Arg Asp Ala Met Arg Leu Gly Ala Glu Val Tyr His Thr Leu
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Lys Gly Val Ile Lys Asp Lys Tyr Gly Lys Asp Ala Thr Asn Val Gly
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Glu Leu Val Lys Glu Ala Ile Asp Lys Ala Gly Tyr Thr Glu Lys Met
225 230 235 240

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Tyr Asp Leu Asp Phe Lys Ser Pro Ala Asp Pro Ser Arg Cys Ile Thr
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290 295 300

Ser Lys Phe Thr Ala Asn Val Gly Ile Gln Ile Val Gly Asp Asp Leu
305 310 315 320

Thr Val Thr Asn Pro Lys Arg Ile Glu Arg Ala Val Glu Glu Lys Ala
325 330 335

Cys Asn Cys Leu Leu Leu Lys Val Asn Gln Ile Gly Ser Val Thr Glu



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280

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tg	ccg	gtgag	catt	g	cc	ctt	gc	ctag	cc	ct	tccag	ggg	gag	gaggg	aga	1320
gag	gg	gatgaa	ggg	agga	agg	cga	acag	aca	gcag	ctaa	ag	agaa	agg	acg	ggat	1380
act	ac	ctggc	gg	ctg	ggg	gat	ctc	aggt	tgg	catt	ctc	ggg	gcag	gagg	aa	1440
tcg	t	ctgacc	at	ctgt	gg	ct	cccc	agg	cct	tta	atgt	gat	caac	ggt	ggc	1500
gga	aca	agtt	gg	ccat	gcag	gag	ttc	atga	tc	ctcc	ccag	t	ggg	tg	ctgag	1560
atg	ccat	gcg	act	tggg	ggcc	gag	gt	gtacc	acac	act	caa	ggg	ggt	catc	aagg	1620
ac	gg	caagga	tg	ccact	aat	gtg	ggg	gggatg	aagg	cgg	ctt	tg	cccc	caat	atc	1680
acag	cga	agg	tg	agg	ccc	gg	agcc	cttacc	ccag	ct	gaat	ctccc	gttag	gaa	agct	1740
acac	gc	gggt	tttt	ga	actt	ctg	aaa	atct	caa	at	ggtag	tag	ccc	ctag	ggt	1800
cgg	gg	ccttc	ctatt	tcca	catag	acc	ct	ggag	ctcag	ctgt	gac	ctg	ctgag	ctaaa		1860
cct	gtt	gcat	aggt	cct	cac	cag	act	gctg	aga	atatt	gg	taag	tgg	tct	ggg	1920
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<211> 1316

<212> DNA

<213> Rattus Sp.

<400> 20

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aggctcagga agaggtaaga aaagacacaa gagaccagag aagggagaag aattagagag      180
ggaggcagag gaccgctgtc tctacagaca tagctggtag agactgggag gaagggatga      240
accctgagcg catgaaggga aggaggtggc tgggtggtata tggaggatgt agctggggcc      300
agggaaaaga tcctgcactg gggatctgaa gctggggaga acaggacacg ggggtggagag      360
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<212> PRT

<213> Homo Sapiens

<400> 21

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20 25 30
Ala Ala Val Pro Ser Gly Ala Ser Thr Gly Ile Tyr Glu Ala Leu Glu
35 40 45
Leu Arg Asp Gly Asp Lys Gln Arg Tyr Leu Gly Lys Gly Val Leu Lys
50 55 60
Ala Val Asp His Ile Asn Ser Thr Ile Ala Pro Ala Leu Ile Ser Ser
65 70 75 80
Gly Leu Ser Val Val Glu Gln Glu Lys Leu Asp Asn Leu Met Leu Glu
85 90 95
Leu Asp Gly Thr Glu Asn Lys Ser Lys Phe Gly Ala Asn Ala Ile Leu
100 105 110
Gly Val Ser Leu Ala Val Cys Lys Ala Gly Ala Ala Glu Arg Glu Leu
115 120 125
Pro Leu Tyr Arg His Ile Ala Gln Leu Ala Gly Asn Ser Asp Leu Ile
130 135 140
Leu Pro Val Pro Ala Phe Asn Val Ile Asn Gly Gly Ser His Ala Gly
145 150 155 160
Asn Lys Leu Ala Met Gln Glu Phe Met Ile Leu Pro Val Gly Ala Glu
165 170 175
Ser Phe Arg Asp Ala Met Arg Leu Gly Ala Glu Val Tyr His Thr Leu
180 185 190
Lys Gly Val Ile Lys Asp Lys Tyr Gly Lys Asp Ala Thr Asn Val Gly
195 200 205
Asp Glu Gly Gly Phe Ala Pro Asn Ile Leu Glu Asn Ser Glu Ala Leu
210 215 220
Glu Leu Val Lys Glu Ala Ile Asp Lys Ala Gly Tyr Thr Glu Lys Ile
225 230 235 240
Val Ile Gly Met Asp Val Ala Ala Ser Glu Phe Tyr Arg Asp Gly Lys
245 250 255
Tyr Asp Leu Asp Phe Lys Ser Pro Thr Asp Pro Ser Arg Tyr Ile Thr
260 265 270

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Gly Asp Gln Leu Gly Ala Leu Tyr Gln Asp Phe Val Arg Asp Tyr Pro
275 280 285

Val Val Ser Ile Glu Asp Pro Phe Asp Gln Asp Asp Trp Ala Ala Trp
290 295 300

Ser Lys Phe Thr Ala Asn Val Gly Ile Gln Ile Val Gly Asp Asp Leu
305 310 315 320

Thr Val Thr Asn Pro Lys Arg Ile Glu Arg Ala Val Glu Glu Lys Ala
325 330 335

Cys Asn Cys Leu Leu Leu Lys Val Asn Gln Ile Gly Ser Val Thr Glu
340 345 350

Ala Ile Gln Ala Cys Lys Leu Ala Gln Glu Asn Gly Trp Gly Val Met
355 360 365

Val Ser His Arg Ser Gly Glu Thr Glu Asp Thr Phe Ile Ala Asp Leu
370 375 380

Val Val Gly Leu Cys Thr Gly Gln Ile Lys Thr Gly Ala Pro Cys Arg
385 390 395 400

Ser Glu Arg Leu Ala Lys Tyr Asn Gln Leu Met Arg Ile Glu Glu Glu
405 410 415

Leu Gly Asp Glu Ala Arg Phe Ala Gly His Asn Phe Arg Asn Pro Ser
420 425 430

Val Leu

<210> 22

<211> 434

<212> PRT

<213> Rattus Sp.

<400> 22

Met Ser Ile Gln Lys Ile Trp Ala Arg Glu Ile Leu Asp Ser Arg Gly
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Asn Pro Thr Val Glu Val Asp Leu His Thr Ala Lys Gly Leu Phe Arg
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Ala Ala Val Pro Ser Gly Ala Ser Thr Gly Ile Tyr Glu Ala Leu Glu
35 40 45

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Leu Arg Asp Gly Asp Lys Gln Arg Tyr Leu Gly Lys Gly Val Leu Lys
 50 55 60
 Ala Val Asp His Ile Asn Ser Thr Ile Ala Pro Ala Leu Ile Ser Ser
 65 70 75 80
 Gly Leu Ser Val Val Glu Gln Glu Lys Leu Asp Asn Leu Met Leu Glu
 85 90 95
 Leu Asp Gly Thr Glu Asn Lys Ser Lys Phe Gly Ala Asn Ala Ile Leu
 100 105 110
 Gly Val Ser Leu Ala Val Cys Lys Ala Gly Ala Ala Glu Lys Asp Leu
 115 120 125
 Pro Leu Tyr Arg His Ile Ala Gln Leu Ala Gly Asn Ser Asp Leu Ile
 130 135 140
 Leu Pro Val Pro Ala Phe Asn Val Ile Asn Gly Gly Ser His Ala Gly
 145 150 155 160
 Asn Lys Leu Ala Met Gln Glu Phe Met Ile Leu Pro Val Gly Ala Glu
 165 170 175
 Ser Phe Arg Asp Ala Met Arg Leu Gly Ala Glu Val Tyr His Thr Leu
 180 185 190
 Lys Gly Val Ile Lys Asp Lys Tyr Gly Lys Asp Ala Thr Asn Val Gly
 195 200 205
 Asp Glu Gly Gly Phe Ala Pro Asn Ile Leu Glu Asn Ser Glu Ala Leu
 210 215 220
 Glu Leu Val Lys Glu Ala Ile Asp Lys Ala Gly Tyr Thr Glu Lys Met
 225 230 235 240
 Val Ile Gly Met Asp Val Ala Ala Ser Glu Phe Tyr Arg Asp Gly Lys
 245 250 255
 Tyr Asp Leu Asp Phe Lys Ser Pro Ala Asp Pro Ser Arg Cys Ile Thr
 260 265 270
 Gly Asp Gln Leu Gly Ala Leu Tyr Gln Asp Phe Val Arg Asn Tyr Pro
 275 280 285
 Val Val Ser Ile Glu Asp Pro Phe Asp Gln Asp Asp Trp Ala Ala Trp
 290 295 300
 Ser Lys Phe Thr Ala Asn Val Gly Ile Gln Ile Val Gly Asp Asp Leu
 305 310 315 320

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Thr Val Thr Asn Pro Lys Arg Ile Glu Arg Ala Val Glu Glu Lys Ala
325 330 335

Cys Asn Cys Leu Leu Lys Val Asn Gln Ile Gly Ser Val Thr Glu
340 345 350

Ala Ile Gln Ala Cys Lys Leu Ala Gln Glu Asn Gly Trp Gly Val Met
355 360 365

Val Ser His Arg Ser Gly Glu Thr Glu Asp Thr Phe Ile Ala Asp Leu
370 375 380

Val Val Gly Leu Cys Thr Gly Gln Ile Lys Thr Gly Ala Pro Cys Arg
385 390 395 400

Ser Glu Arg Leu Ala Lys Tyr Asn Gln Leu Met Arg Ile Glu Glu Glu
405 410 415

Leu Gly Glu Glu Ala Arg Phe Ala Gly His Asn Phe Arg Asn Pro Ser
420 425 430

Val Leu

<210> 23

<211> 434

<212> PRT

<213> homo sapiens

<400> 23

Met Ser Ile Glu Lys Ile Trp Ala Arg Glu Ile Leu Asp Ser Arg Gly
1 5 10 15

Asn Pro Thr Val Glu Val Asp Leu Tyr Thr Ala Lys Gly Leu Phe Arg
20 25 30

Ala Ala Val Pro Ser Gly Ala Ser Thr Gly Ile Tyr Glu Ala Leu Glu
35 40 45

Leu Arg Asp Gly Asp Lys Gln Arg Tyr Leu Gly Lys Gly Val Leu Lys
50 55 60

Ala Val Asp His Ile Asn Ser Thr Ile Ala Pro Ala Leu Ile Ser Ser
65 70 75 80

Gly Leu Ser Val Val Glu Gln Glu Lys Leu Asp Asn Leu Met Leu Glu
Page 30

Leu Asp Gly Thr Glu Asn Lys Ser Lys Phe Gly Ala Asn Ala Ile Leu
 100 105 110
 Gly Val Ser Leu Ala Val Cys Lys Ala Gly Ala Ala Glu Arg Glu Leu
 115 120 125
 Pro Leu Tyr Arg His Ile Ala Gln Leu Ala Gly Asn Ser Asp Leu Ile
 130 135 140
 Leu Pro Val Pro Ala Phe Asn Val Ile Asn Gly Gly Ser His Ala Gly
 145 150 155 160
 Asn Lys Leu Ala Met Gln Glu Phe Met Ile Leu Pro Val Gly Ala Glu
 165 170 175
 Ser Phe Arg Asp Ala Met Arg Leu Gly Ala Glu Val Tyr His Thr Leu
 180 185 190
 Lys Gly Val Ile Lys Asp Lys Tyr Gly Lys Asp Ala Thr Asn Val Gly
 195 200 205
 Asp Glu Gly Gly Phe Ala Pro Asn Ile Leu Glu Asn Ser Glu Ala Leu
 210 215 220
 Glu Leu Val Lys Glu Ala Ile Asp Lys Ala Gly Tyr Thr Glu Lys Ile
 225 230 235 240
 Val Ile Gly Met Asp Val Ala Ala Ser Glu Phe Tyr Arg Asp Gly Lys
 245 250 255
 Tyr Asp Leu Asp Phe Lys Ser Pro Thr Asp Pro Ser Arg Tyr Ile Thr
 260 265 270
 Gly Asp Gln Leu Gly Ala Leu Tyr Gln Asp Phe Val Arg Asp Tyr Pro
 275 280 285
 Val Val Ser Ile Glu Asp Pro Phe Asp Gln Asp Asp Trp Ala Ala Trp
 290 295 300
 Ser Lys Phe Thr Ala Asn Val Gly Ile Gln Ile Val Gly Asp Asp Leu
 305 310 315 320
 Thr Val Thr Asn Pro Lys Arg Ile Glu Arg Ala Val Glu Glu Lys Ala
 325 330 335
 Cys Asn Cys Leu Leu Leu Lys Val Asn Gln Ile Gly Ser Val Thr Glu
 340 345 350

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Ala Ile Gln Ala Cys Lys Leu Ala Gln Glu Asn Gly Trp Gly Val Met
 355 360 365

Val Ser His Arg Ser Gly Glu Thr Glu Asp Thr Phe Ile Ala Asp Leu
 370 375 380

Val Val Gly Leu Cys Thr Gly Gln Ile Lys Thr Gly Ala Pro Cys Arg
 385 390 395 400

Ser Glu Arg Leu Ala Lys Tyr Asn Gln Leu Met Arg Ile Glu Glu Glu
 405 410 415

Leu Gly Asp Glu Ala Arg Phe Ala Gly His Asn Phe Arg Asn Pro Ser
 420 425 430

Val Leu

<210> 24
 <211> 434
 <212> PRT
 <213> Chicken

<400> 24

Met Ala Val Glu Arg Ile His Ala Arg Glu Ile Leu Asp Ser Arg Gly
 1 5 10 15

Asn Pro Thr Val Glu Val Asp Leu Tyr Thr His Lys Gly Met Phe Arg
 20 25 30

Ala Ala Val Pro Ser Gly Ala Ser Thr Gly Ile Tyr Glu Ala Leu Glu
 35 40 45

Leu Arg Asp Asn Asp Lys Ser Arg Phe Leu Gly Lys Gly Val Leu Gln
 50 55 60

Ala Val Asp His Ile Asn Ser Thr Val Ala Pro Ala Ile Val Gly Ser
 65 70 75 80

Gly Leu Ser Val Val Asp Gln Glu Lys Ile Asp Asn Leu Met Leu Glu
 85 90 95

Met Asp Gly Thr Glu Asn Lys Ser Lys Phe Gly Ala Asn Ala Ile Leu
 100 105 110

Gly Val Ser Leu Ala Val Cys Lys Ala Gly Ala Ala Glu Lys Asp Val
 115 120 125

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Pro Leu Tyr Arg His Ile Ala Asp Leu Ala Gly Asn Ser Asp Leu Ile
 130 135 140
 Leu Pro Val Pro Ala Phe Asn Val Ile Asn Gly Gly Ser His Ala Gly
 145 150 155 160
 Asn Lys Leu Ala Met Gln Glu Phe Met Ile Leu Pro Val Gly Ala Glu
 165 170 175
 Ser Phe Arg Asp Ala Met Arg Ile Gly Ala Glu Val Tyr His Asn Leu
 180 185 190
 Lys Ser Val Ile Lys Glu Lys Tyr Gly Lys Asp Ala Thr Asn Val Gly
 195 200 205
 Asp Glu Gly Gly Phe Ala Pro Asn Ile Leu Glu Asn Ser Glu Ala Leu
 210 215 220
 Glu Leu Leu Lys Glu Ala Ile Asp Lys Ala Gly Tyr Thr Asp Lys Ile
 225 230 235 240
 Val Ile Gly Met Asp Val Ala Ala Ser Glu Phe Tyr Arg Asp Gly Lys
 245 250 255
 Tyr Asp Leu Asp Phe Lys Ser Pro Asp Asp Pro Ser Arg Tyr Ile Ser
 260 265 270
 Ala Asp Glu Leu Gly Asp Leu Tyr Gln Ser Phe Val Arg Ala Tyr Pro
 275 280 285
 Val Leu Ser Ile Glu Asp Pro Phe Asp Gln Asp Asp Trp Glu Ala Trp
 290 295 300
 Ser Lys Phe Thr Ala Asn Val Gly Ile Gln Ile Val Gly Asp Asp Leu
 305 310 315 320
 Thr Val Thr Asn Pro Lys Arg Ile Glu Arg Ala Val Glu Glu Lys Ala
 325 330 335
 Cys Asn Cys Leu Leu Leu Lys Val Asn Gln Ile Gly Ser Val Thr Glu
 340 345 350
 Ala Ile Gln Ala Cys Lys Leu Ala Gln Glu Asn Gly Trp Gly Val Met
 355 360 365
 Val Ser His Arg Ser Gly Glu Thr Glu Asp Thr Phe Ile Ala Asp Leu
 370 375 380
 Val Val Ala Leu Cys Thr Gly Gln Ile Lys Thr Gly Ala Pro Cys Arg
 385 390 395 400

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Ser Glu Arg Leu Ala Lys Tyr Asn Gln Leu Met Arg Ile Glu Glu Glu
 405 410 415

Leu Gly Asp Glu Ala Arg Phe Ala Gly His Asn Phe Arg Asn Pro Ser
 420 425 430

Val Leu